

WHAT IS CLAIMED IS:

5 1. An Internet-based consumer product marketing, merchandising and education/information system which enables manufacturers, their agents, retailers and their agents, and consumers to carryout product-related functions along the demand side of the retail chain, comprising:

a central RDBMS (i.e. data warehouse) for storing a central database of consumer product related information resource files (IRFs) each said IRF being indexed with a Universal Product Number (UPN) assigned thereto by the manufacturer of the consumer product, or its designated agent, which relates to said consumer product;

10 a first subsystem for enabling a manufacturer's marketing, brand and/or product managers to create and manage a local RDBMS containing UPN-indexed IRFs related to the consumer products of the manufacturer being offered for sale in both physical and/or electronic marketplaces, and periodically transport said local RDBMS of UPN-indexed IRFs to said central RDBMS by electronic data transport techniques, said local RDBMS of UPN-indexed IRFs being selected by the manufacturer's marketing, brand and/or product managers so as to create a desired brand image for each said consumer product of the manufacturer;

15 a second subsystem for enabling consumers to access one or more UPN-indexed IRFs in said central RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the demand side of the retail chain; and

20 one or more subsystems selected from the group consisting of:

25 a third subsystem for enabling manufacturers and their advertising and marketing agents to access one or more UPN-indexed IRFs in said central RDBMS, to display consumer product advertisements to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to project the desired brand image to consumers; and

30 a fourth subsystem for enabling retailers and their marketing and promotional agents to access one or more UPN-indexed IRFs in said central RDBMS, to promote consumer products to consumers, at or near the point of purchase or sale within both physical and/or electronic retail shopping environments so as to promote the sale of such products in inventory;

 wherein said central RDBMS, said local RDBMS, and said first, second, third and fourth subsystems are each operably connected to the infrastructure of the Internet.

5 2. The Internet-based consumer product marketing, merchandising and education/information system of claim 35N-indexed IRFs in said central RDBMS, to request and obtain information about a manufacturer's consumer product so as to make informed/educated purchases along the supply side of the retail chain.

10 3. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said second subsystem comprises one or more information access and display devices selected from the group consisting of:

15 a network of barcode-driven/touch-screen-enabled physical CPI kiosks are physically installed within physical retail environments using wireless Internet-connectivity enabling technology, and made accessible to retail shoppers in physical retail environments; and

20 a network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW (e.g. in EC-based retail stores and catalogs, online auction sites, Internet product advertisements), and made accessible to retail shoppers across the Internet.

25 4. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem further comprises a plurality of Web (http) information servers for driving said network of barcode-driven/touch-screen-enabled physical CPI kiosks.

30 5. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said second subsystem further comprises a plurality of CPIR-enabling Applet servers for driving said network of virtual CPI kiosks enabled by CPIR-enabling Applets symbolically embedded within the HTML-fabric of the WWW, including retailer-oriented WWW sites served to physical CPI kiosks in a retailer's store.

35 6. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said central RDBMS further includes a data processing/filtering subsystem for processing data contained within said central RDBMS so that

each physical CPI kiosk connected to an enabling Web server (and deployed within a particular retailer's store) is capable of displaying only UPN-indexed IRFs created by manufacturer's (or their agents) who (i) sell products in the retailer's physical store and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's store shelves about which said physical CPI kiosk is physically installed.

7. The Internet-based consumer product marketing, merchandising and education/information system of claim 5, wherein said second subsystem comprises a CPIR-enabling Applet/Servlet Generator for automatically generating, for each UPN-indexed IRF record in said central RDBMS, a CPIR-enabling Applet/Servlet, wherein (i) the compiled code associated with the CPIR-enabling Applet/Servlet is loaded onto one of said plurality of CPIR-enabling Applet servers, and (ii) the corresponding CPIR-enabling Applet tag is loaded within a CPIR-enabling Applet Catalog Web Server for viewing and downloading by retailers, advertisers, auctioneers, et al, and subsequent embedment into the HTML-fabric of WWW.

8. The Internet-based consumer product marketing, merchandising and education/information system of claim 5, wherein said second subsystem comprises a data processing/filtering subsystem (e.g. modules of data processing scripts), integrated with said central RDBMS, for processing data within said central RDBMS so that each virtual CPI kiosk deployed within a particular retailer's electronic store and enabled by at least one said CPIR-enabling Applet server is capable of displaying only UPN-indexed IRFs created by manufacturer's who (i) sell products in the retailer's electronic store (i.e. e-store) and (ii) have acquired rights and/or privileges (by the retailer) to display products on the retailer's virtual shelves (e.g. Web pages) about which the virtual kiosk is installed within the HTML-fabric of the retailer's e-store.

9. The Internet-based consumer product marketing, merchandising and education/information system of claim 1, wherein said first subsystem comprises:

one or more information servers for delivering a suite of information services to manufacturers (i.e. vendors) including, the downloading of and providing technical support for software-based EDI-enabled UPN-indexed IRF management and transport tools that are made

available to registered manufacturers, and their agents, as well as to anyone else operating along the retain chain as a vendor of consumer products (which may also include retailers as well); and

5 wherein said software-based EDI-enabled UPN-indexed IRF management and transport tools enable the manufacturer's marketing, brand and/or product managers (and their support personnel) to efficiently carry out UPN-indexed IRF management and transport operations which are required to build and maintain said local RDBMS.

10 10. The Internet-based consumer product marketing, merchandising and education/information system of claim 351, wherein said second subsystem comprises a data processing/filtering subsystem for data processing (i.e. filtering) said UPN-indexed IRF's and data contained in said central RDBMS, in various ways prior to distribution to consumers, so as to preserve the trust, confidence and goodwill developed between manufacturers and retailers in both physical and electronic streams of commerce.

15 11. The Internet-based consumer product marketing, merchandising and education/information system of claim 10, wherein said data processing/filtering subsystem involves using information about (i) the manufacturers represented (or promoted) by a particular retailer in a particular retail environment, as well as (ii) the rights and/or privileges accorded to product manufacturers and/or distributors (i.e. vendors) by retailers with regard to displaying a manufacturer's product in a particular aisle of the retailer's store and optionally at a particular shelf location, as well as on a particular Web-page(s) of a retailer's electronic store or catalog (e.g. virtual aisles) and optionally at a particular location (i.e. virtual shelf location) therealong.

20 25. The Internet-based consumer product marketing, merchandising and education/information system of claim 9, wherein said software-based EDI-enabled UPN-indexed IRF tools enable a manufacturer's marketing, brand and/or managers to create and manage a set of UPN-indexed IRFs for each consumer product within their product portfolio, store said set of UPN-indexed IRFs within said local RDBMS, and electronically transport said set of UPN-indexed IRFs from said local RDBMS to said central RDBMS, for distribution and display to consumers in the form of a interactive GUI having URL links to said set of UPN-indexed IRFs.

5 13. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said third subsystem enables an advertisers (including a retailer, a manufacturer or its agent) to buy advertising slots available on particular retailer-deployed barcode-driven physical CPI kiosks (and/or retailer-deployed virtual CPI kiosks) and deliver the short UPN-indexed product advertisements to consumers over physical and/or virtual CPI kiosks in physical and/or electronic retail stores during moments when consumers are not requesting consumer product related information from said system.

10 14. The Internet-based consumer product marketing, merchandising and education/information system of claim 10, wherein said third subsystem enables advertisers to perform one or more functions selected from the group consisting of: (i) register with the system; (ii) log onto the Advertisement Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered advertiser can consider purchasing advertisement slots on manufacturer/retailer authorized kiosks; (iv) purchase advertisement slots on manufacturer/retailer authorized physical or virtual) CPI kiosks deployed in physical or electronic retail shopping space; (v) create, deploy and manage advertising campaigns over one or more physical and/or virtual kiosks deployed by retailers in retail space; and (vi) monitor the performance of kiosk-based advertising campaigns during execution, as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.

25 15. The Internet-based consumer product marketing, merchandising and education/information system of claim 3, wherein said fourth subsystem enables a promoter (including a retailer, a manufacturer or its agent) to create customized product promotion campaigns, containing short UPC-indexed product advertisements, sales prices and aisle/shelf location directions, for presentation over the network of barcode-driven/touch-screen enabled physical CPI kiosks deployed within its retail store, or chain of stores, and later analyze the effectiveness of the campaign by comparing sales data collected at the barcode driven point-of-

sale (POS) stations within the same retail stores in which the participating physical CPI kiosks are deployed.

16. The Internet-based consumer product marketing, merchandising and
5 education/information system of claim 3, wherein said fourth subsystem enables promoters to perform one or more functions selected from the group consisting of: (i) register with system; (ii) log onto the Promotion Slot Marketing/Sales/Management Web Site maintained by the system administrator or its designated agent; (iii) view catalogs of physical and/or virtual CPI kiosks deployed within retail shopping environments by retailers, at which a registered promoter can consider purchasing or otherwise acquiring promotion slots on manufacturer/retailer authorized kiosks; (iv) purchase or otherwise acquire (product sales) promotion slots on manufacturer/retailer authorized physical or virtual kiosks deployed in retail shopping space; (v) create, deploy and manage product promotion campaigns over one or more physical and/or virtual kiosks deployed by retailers (or manufacturers) in retail space; and (vi) monitor the performance of kiosk-based promotion campaigns as required by client demands and prevailing business considerations, using any Web-enabled client subsystem.